

IN THE CLAIMS

Please amend claims 1 through 4, 9 and 17 through 22, and add claims 34 through 38,
as follows:

1. (Amended) A video printer, comprising:
means responsive to first data representative of successive lines of a video raster scan, for deriving second data representative of successive columns of video data extending transversely across lines of said video raster scan from said first data;
means for printing the columns of data successively;
memory means for storing data representative of fields of said raster scan;
means comprising internal memory means for storing data representative of fields of said raster scan and means for reading the columns of data from the memory means, for converting data stored in said memory means, for successive fields of the raster scan, into the columns of digital video data during respective successive periods associated with the occurrence of successive field periods of the scan.

2. (Amended) A video printer according to claim 1 wherein successive fields of the raster scan have associated [therewith respective] blanking periods, and the columns of data are read-from the memory means during [respective] corresponding successive ones of the blanking periods.

3. (Amended) A video printer according to claim 1, further comprising:
video output means for receiving said raster scan read from said memory means,
and
monitoring address generating means for addressing the memory means to produce
said [scan] raster scan for said video output means.

4. (Amended) A video printer according to claim 1, further comprised of said
raster scan data being [is] representative of a color video display, and said memory means
[comprises] comprising a plurality of memory units for storing [respective different color
representing] signals representing corresponding different colors for the raster scan field.

9. (Amended) A high speed color video printer, comprising:
[means comprising memory means for storing digital chrominance signals, for
converting said digital chrominance signals into a sequence of columns of video data for each
field, and into analog chrominance signals into digital video data;]
means for storing digital video signals [are stored into] in an internal memory
[means] as video data, reading and accommodating printing of a column unit of said video data
[is outputted] during one field period of each blanking signal interval, and applying a field unit
of said video data [is outputted to] for a display [side] providing a variable visual image during
a residual period [which] that excludes [a periods whereunder] said field period of reading and
enabling printing of said video data [is outputted to print during one field period];

selection means for selectively providing one color of said video data [out of] from
said column unit of video data [outputted from said data converting means];

line memory means for enabling printing by storing and then reading said video
data selectively provided by said [selective] selection means; and

digital-to-analog converter means for enabling [a] said display by converting field
[unit] units of said video data [from said data converting means] into analog signals.

17. (Amended) A high speed color video printer, comprising:

means for separating a luminance component and a chrominance component of a video
signal;

first switching means for providing, in response to a first selection signal [from control
means], a first switch signal being one of a super video signal and said luminance and
chrominance components;

decoding means for providing sync signals and said chrominance components in response
to the first switching signal;

second switching means for providing, in response to a second selection signal [from the
control means], second switching output signals, said second switching output signals being one
of said chrominance components and said sync signal from the decoding means, and external
color and sync signals;

analog-to-digital converting means for providing a converted said sync signal of said second switching output signals [to the control means], and for providing one of a converted chrominance components and converted external color signals;

data converting means for providing color video data corresponding to said one of converted chrominance components and converted external color signals in response to a mode signal [from said control means];

third switching means for selectively applying said color video data to line memory means in response to a third selection signal [from the control means]; and

an intermediate gradation converting circuit for providing said color video data of the line memory in columns to a thermal print head for printing.

18. (Amended) [A data converter of a high speed color] The printer of claim 17, further comprised of said data converter comprising:

internal memory for storing said color video data, said internal memory comprising a print output port and a display output port;

recording address generating means for providing recording addresses in said internal memory for storing said color video data by generating said recording addresses in response to a recording mode signal [of the control means];

printing address generating means for providing printing addresses of said internal memory of said color video data for printing in columns by generating said printing addresses in response to a printing mode signal [of the control means];

monitoring address generating means for providing monitoring addresses of odd rows and monitoring addresses of even rows of said color video data stored in said internal memory by generating said monitoring addresses of said internal memory in response to a monitoring mode signal [of the control means]; and

address selector means for selecting one of said recording addresses, said printing addresses and said monitoring addresses in response respectively to one of said recording mode signal, said printing mode signal and said monitoring mode signal.

19. (Amended) The [data converter] printer of claim 18, wherein after said printing in columns of said color video data:

first, odd rows of an odd field of a frame of said printed color video data is provided to a monitor during a remainder of an odd field period of said odd field; and

second, even rows of an even field of said printed color video data is provided to the monitor during a remainder of an even field period of the even field.

20. (Amended) The [data converter] printer of claim 18, wherein said printing address generating means generates said printing addresses for printing of a first of said columns of said color video data during a vertical synchronizing and equalizing pulse period of a blanking interval of a first field period.

21. (Amended) The [data converter] printer of claim 18, wherein said printing address generating means generates said printing addresses for printing a number n of said columns of said color video data during a vertical synchronizing and equalizing pulse period of a blanking interval of a number n field period, where n is an integer ranging sequentially from 1 to a number of columns in a frame.

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22. (Amended) The [data converter] printer of claim 18, wherein said internal memory comprises:

a first discrete memory for exclusively storing red chrominance components of said color video data at corresponding said recording addresses;

a second discrete memory for exclusively storing green chrominance components of said color video data at corresponding said recording addresses; and

a third discrete memory for exclusively storing blue chrominance components of said color video data at corresponding said recording addresses.

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23. The printer of claim 1, wherein said deriving means comprises:

printing address generating means, recording address generating means and an internal memory,

said deriving means storing color video data components of said first data in the internal memory at recording addresses generated by said recording address generating means in response to a recording signal applied to said deriving means and, said selectively reading said

stored color video data of the internal memory in said columns at printing addresses generated in said printing address generating means and corresponding to pixels of a raster scan of an interlaced video field, said selective reading provided for enabling printing of visual images representative of said color video data in response to a printing signal; and

line memory means for providing said selectively read color video data for column-by-column printing by storing said selectively read color video data in columns.

—35. The printer of claim 34, wherein said printing address generating means generates said printing addresses for printing of a first of said columns of said selectively read color video data during a vertical synchronizing and equalizing pulse period of a blanking interval of a first field period.

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—36. The printer of claim 34, wherein said printing address generating means generates said printing addresses for printing a number n of said columns of said selectively read color video data during a vertical synchronizing and equalizing pulse period of a blanking interval of a number n field period, where n is an integer ranging sequentially from 1 to a number of columns in a frame.

—37. The printer of claim 34, wherein said deriving means further comprises monitoring address generating means for providing monitoring addresses of odd rows and monitoring

addresses of even rows of said color video data stored in said internal memory by generating said monitoring addresses of said internal memory.

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--38. The printer of claim 34, wherein after said deriving means has selectively read said color video data for printing, said deriving means first provides said odd rows of an odd field of a frame of said color video data to the displaying means during a remainder of an odd field period of said odd field and second provides said even rows of an even field of said color video data to the displaying means during a remainder of an even field period of said even field.
